

2.4 Utilities and Emergency Services

2.4.1 Affected Environment

This section analyzes the potential impacts of the I-5 HOV Lane Extension Project on utilities and emergency services. This section is based on a review of existing utility and service providers and facilities in and immediately adjacent to the project disturbance limits.

2.4.1.1 Utilities

Utilities within the I-5 HOV Lane Extension project limits include:

- Overhead electrical, telephone, and cable TV lines
- Underground gas, sewer, water, electric, cable TV, and telephone lines

Within the study area, Southern California Gas (SCG) provides gas, San Diego Gas and Electric Company (SDGE) provides electricity, the City of San Clemente and City of San Juan Capistrano provide sewer services, the South Coast Water District (SCWD) provides water and sewer, the Tri Cities Metropolitan Water District (MWD) provides water, Cox Communications provides cable TV services, and AT&T provides telephone services.

2.4.1.2 Emergency Services

Fire protection services for the study area are provided through a fire services district that is administered and staffed by the Orange County Fire Authority (OCFA). The OCFA also provides emergency vehicles to the study area. Three OCFA fire stations that serve the study area are located within 0.5 mi of the project limits. These fire stations are listed below:

- OCFA Station No. 7 (located 0.28 mi north of the project limits)
31865 Del Obispo
San Juan Capistrano, CA 92675
- OCFA Station No. 29 (located 0.11 mi west of the project limits)
26111 Victoria Boulevard
Dana Point, CA 92624

- OCFA Station No. 50 (0.09 mi east of the project limits)
670 Camino de Los Mares
San Clemente, CA 92673

The Orange County Sheriff Department is responsible for police patrol and protection services in the Cities of Dana Point, San Clemente, and San Juan Capistrano. There are no Sheriff Patrol stations within the study area.

The California Highway Patrol (CHP) is responsible for patrol jurisdiction over all California highways. A CHP office is located approximately 130 feet (ft) west of the project limits at 32951 Camino Capistrano, San Juan Capistrano.

Hospital service is provided by Saddleback Memorial Medical Center, located at 654 Camino De Los Mares (approximately 240 ft east of the project limits) in the City of San Clemente, California.

2.4.2 Environmental Consequences

2.4.2.1 Temporary Impacts

Build Alternative 4 with Design Option A (Preferred Alternative)

The proposed project would cause temporary indirect construction-related traffic impacts. During construction, temporary traffic impacts may be experienced in the proposed project vicinity. Delays in traffic can be expected during construction. These delays could affect motorist travel times and the response time of emergency service vehicles. The construction-related traffic impacts would be temporary and a required TMP would be prepared to minimize effects during the construction period. Therefore, construction-related traffic impacts would not cause an adverse impact to public and emergency services. Minimization measures U-2, U-3, and U-4 are included to further minimize impacts. Table 2.4-1 shows the impacts to utilities as a result of Alternative 4 with Design Option A.

In addition, the 12-inch reclaimed water line will also be relocated by jacking across the freeway in order to place it in an encasement.

The proposed project would have direct temporary effects to the City of San Juan Capistrano 12-inch sewer line. The existing 22-inch casing will be extended on both sides of I-5 to protect the line from the widened pavement section.

Table 2.4-1 Utility Impacts

Utility Provider	Type of Utility	Potential Utility Impacts
South Coast Water District	Reclaimed water line	A 12-inch reclaimed water line that crosses Interstate 5 (I-5) at approximately 580 feet (ft) south of the Avenida Pico undercrossing (UC) at STA 185+20 will be relocated by jacking a new easement across the freeway and placing the relocated water line inside it. This line is not currently encased. The total length of encasement is approximately 440 ft.
South Coast Water District	Water line	A 10-inch water line located along Avenida Pico will be protected in place during construction activities.
City of San Clemente	Sewer line	An 8-inch sewer line located along Avenida Pico will be protected in place during construction activities.
City of San Clemente	Sewer line	A 12-inch sewer line located along Avenida Pico will be protected in place during construction activities.
South Coast Water District	Water line	A 27-inch water line located along Avenida Pico will be protected in place during construction activities.
Southern California Gas	Gas line	A 10-inch gas line located along Avenida Pico will be protected in place during construction.
Cox Communications	Cable Television	A Cox Cable line located along Avenida Pico will be protected in place during construction.
San Diego Gas and Electric Company	Underground electrical line	An underground 12-kilovolt (kV) electricity line along Avenida Pico will require the relocation of handholds and a transformer located at the northeast corner of Avenida Pico and Via Pico Plaza.
City of San Clemente	Sewer line	An 18-inch sewer line that crosses I-5 approximately 1,150 ft north of the Avenida Pico UC at STA 202+50 will be protected in place during construction activities.
South Coast Water District	Water line	A 27-inch water line that crosses I-5 approximately 1,990 ft north of the Avenida Vaquero UC at STA 292+90 will be protected in place along both sides of I-5.
San Diego Gas and Electric Company	Overhead electrical line	There are two overhead 12 kV electrical lines crossing I-5 approximately 170 ft north and 635 ft north of the Camino De Estrella overcrossing (OC). This line also runs parallel to the northbound on-ramp from Camino De Estrella. The overhead lines crossing I-5 will be protected in place. The portion of the line running parallel to the Camino de Estrella NB on-ramp will potentially be temporarily relocated in order to allow for the construction of a new soundwall along the east side of I-5 along the northbound on-ramp.
South Coast Water District	Sewer line	An 8-inch sewer line that crosses I-5 approximately 1,085 ft north of the Camino De Estrella OC at STA 327+85 will be protected in place during construction.
AT&T	Telephone line	A telephone line that crosses I-5 approximately 1,160 ft north of the Camino De Estrella OC at STA 328+60 will be protected in place during construction.
South Coast Water District	Sewer line	An eight-inch sewer line that crosses I-5 at approximately 2,020 ft north of the Camino De Estrella OC at STA 335+20 will be protected in place during construction.
Tri Cities Metropolitan Water District	Water line	A 21-inch water line that crosses I-5 approximately 1,215 ft south of Via California at STA 349+35 will be protected in place during construction.
City of San Juan Capistrano	Sewer line	This 12-inch sewer line crosses I-5 approximately 1,200 ft north of Via California OC at STA 372+00. The existing 22-inch casing will be extended on both sides of I-5 to protect the line from the widened pavement section.

Source: I-5 HOV Table – Proposed Utility Relocations for Alternatives 2 and 4, RMC, Inc., November 2010

The proposed project would have direct temporary effects to the San Diego Gas and Electric Company's 12-kv underground electric line. This will require relocation of handholds and a transformer located at the northeast corner of Avenida Pico and Via Pico Plaza.

The proposed project may result in direct temporary effects if the portion of the line running parallel to the northbound Camino de Estrella on-ramp is relocated in order to allow for the construction of a new soundwall along the on-ramp.

These temporary direct impacts to utilities are not considered substantial due to standard project requirements that would be followed to avoid and minimize service disruptions during project construction. All utilities that require relocation as a result of this project would be relocated on site within the environmentally evaluated footprint of this project. Measure U-1 is included to avoid and further reduce impacts.

Some temporary indirect impacts to emergency response times may occur as part of traffic control and traffic delays during construction. The closures at the Avenida Pico interchange would result in short-term temporary impacts. However, these ramp closures will be limited to potential weekend closures and would not exceed the period of one week. Therefore, these temporary ramp closures at the Avenida Pico interchange are not considered adverse.

A TMP, as outlined in Section 1.3, Project Description, would be implemented to minimize temporary impacts to emergency response times. Therefore, direct and indirect temporary impacts to utilities and emergency services as a result of Build Alternative 4 with Option A are not considered adverse.

2.4.2.2 Permanent Impacts

Build Alternative 4 with Design Option A (Preferred Alternative)

All impacts to utilities would be temporary and would be rectified when relocations of certain utilities and project construction is complete. As a result, there are no permanent impacts to utilities.

Implementation of Build Alternative 4 with Design Option A is anticipated to result in a positive impact to emergency services by improving the LOS within the project limits and reducing emergency response times.

2.4.3 Avoidance, Minimization, and/or Mitigation Measures

Design, construction, and inspection of utilities that would need to be relocated for the proposed project would be undertaken in accordance with Department requirements. The Department would coordinate with the affected service provider in each instance to ensure that work is during times of low demand and in accordance with the appropriate requirements and criteria.

The following minimization measure should be implemented:

- U-1** All public utility lines, pipes, and cables that are disturbed or removed to accommodate the proposed project must be replaced or relocated within the project limits to continue to meet the needs of residents and businesses in the community. During construction, arrangements must be made to avoid disruption in utility services. If interruption in service is unavoidable, then notice must be given and proper arrangements shall be made with residents and businesses.

In addition to the TMP, the following minimization measures address short-term adverse traffic impacts related to emergency access during construction activities.

- U-2** In accordance with standard project requirements, a Transportation Management Plan (TMP) shall be prepared for the project prior to construction. The TMP will include plans and requirements for the project area that must be implemented during project construction to ensure traffic safety, minimize construction-related traffic congestion, and minimize driver and pedestrian inconveniences.
- U-3** To ensure that emergency response times are not disrupted, the Orange County Sheriff and Fire Departments must be informed of the project construction schedule, lane closures (if any), and detour plans (if any) well in advance of any detour plan or lane closure being implemented throughout the construction period.
- U-4** Area residents and owners/managers of businesses and public facilities must be continually informed of the project development and construction plans prior to and during the construction period so that they are aware of the construction timing, traffic detour plans, lane/road closures, and transit detour plans.

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